

REVISED FINAL TEXT OF REGULATIONS
PHASE I ENVIRONMENTAL SITE ASSESSMENTS (PROPOSED NEW AND
EXPANDING SCHOOL SITES) – BASED ON 11/27/06 EMERGENCY REGULATIONS
Department Reference Number R-2004-01

Amend the California Code of Regulations, title 22, division 4.5, Chapter 51.5 Assessment of School Sites, Article 1. Phase I Environmental Site Assessments (Proposed New and Expanding School Sites) sections as follows:

Amend section 69100 to read:

§69100. Purpose.

The purpose of these regulations is to ~~provide~~establish guidelines for a Phase I Environmental Site Assessment (Phase I) conducted prior to acquisition of a school site, or where the school district owns or leases a school site, prior to the construction of a project (hereinafter referred to as “Proposed School Site”) under title 1, division 1, part 10.5, chapter 1 of the Education Code (commencing with section 17210). This article ~~contains~~establishes guidelines for completion of a Phase I and a Phase I Addendum. Procedures are included for sampling and submitting analytical results for lead in soil from lead-based paint, organochlorine pesticides in soil from termiticide application, and/or polychlorinated biphenyls in soil from electrical transformers in Phase I Addendum reports to the Department of Toxic Substances Control.

Note: Authority cited: Section 58012, Health and Safety Code; and Section 17210(g), Education Code. Reference: Sections 17210(g) and 17213.1, Education Code.

No change to:

§69101. Applicability.

Amend section 69102 to read:

§69102. Definitions.

The definitions set forth in this section govern interpretation of this article. Unless the context requires otherwise and except as provided in this section, definitions contained in title 1, division 1, part 10.5, chapter 1 of the Education Code (commencing with section 17210) or in division 20, chapter 6.8 of the Health and Safety Code (commencing with section 25300) apply to the terms used in this article. If a definition appears in both title 1, division 1, part 10.5, chapter 1 of the Education Code and in division 20, chapter 6.8 of the Health and Safety Code, the definition in the Education Code governs interpretation of this article.

~~(a) "Phase I Addendum" means a report containing results of sampling and analysis, limited to results of lead in soil from lead-based paint, polychlorinated biphenyls in soil from electrical transformers, and/or organochlorine pesticides in soil from termiticide application that is submitted to the Department along with or after the submittal of the Phase I.~~

~~(b) "Department" means the Department of Toxic Substances Control.~~

~~(b) "Lead" means lead from lead-based paint only, for purposes of this article.~~

~~(c) "OCPs" means organochlorine pesticides from termiticide application only, for purposes of this article.~~

~~(d) "Phase I" means a Phase I Environmental Site Assessment.~~

~~(de) "PCBs" means polychlorinated biphenyls from electrical transformers only, for purposes of this article.~~

(e) "Phase I" means a Phase I Environmental Site Assessment which is a preliminary assessment of a site to determine whether there has been or may have been a release of a hazardous material, or whether a naturally occurring hazardous material is present, based on reasonably available information about the site and the area in its vicinity.

(f) "Phase I Addendum" means a report containing results of sampling and analysis, limited to results of lead in soil from lead-based paint, organochlorine pesticides in soil from termiticide application, and/or polychlorinated biphenyls in soil from electrical transformers, for sites where these contaminants are the only potential release or presence of hazardous materials identified in the Phase I. A Phase I Addendum is submitted to the Department along with or after the submittal of the Phase I.

(gf) "USEPA Test Methods" means "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" as referenced in section 69103, subsection (a)(2).

Note: Authority cited: Section 58012, Health and Safety Code; and Section 17210(g), Education Code. Reference: Sections 17210(g) and 17213.1, Education Code.

Amend section 69103 to read:

§69103. References.

(a) When used in this article, the following publications are incorporated by reference:

(1) "American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process," ASTM Standard E-1527-05, approved November 1, 2005; available from American Society for Testing and Materials, 100 Barr Harbor Drive, Post Office Box C700, West Conshohocken, PA 19428-2959, (610) 832-9585; website <http://www.astm.org>

(2) "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 Third Edition, November 1986, as amended by Updates I (July, 1992), II (September, 1994), IIA (August, 1993), IIB (January, 1995), III (December, 1996), IIIA (April, 1998), IIIB (June, 2005), draft IVA (MayJanuary, 1998) and draft IVB (November, 2000); available from the Superintendent of Documents, United States Government Printing Office, Washington, DC 20402, (202) 512-1800; website <http://www.epa.gov/epaoswer/hazwaste/test/sw846.htm>

(3) "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review," EPA 540/R-~~99/00894/012~~; October 1999February 1994, available from National Technical Information Service (NTIS), United States Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161; (703) 487-4650; website <http://www.epa.gov/superfund/programs/clp/guidance.htm>

(4) "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review," EPA 540/R-04/004, October 200494/013; ~~February 1994~~, available from the United States Environmental Protection Agency website <http://www.epa.gov/superfund/programs/clp/guidance.htm>;

(5) "Guidance on Environmental Data Verification and Data Validation," EPAQA/G-8; EPA 240/R-02/004; November 2002Peer Review Draft, June 2004, available from United States Environmental Protection Agency, Quality Staff (2811 R), 1200 Pennsylvania Avenue, NW, Washington, DC 20460; (202) 564-6830; website http://www.epa.gov/quality/qa_docs.html

Note: Authority cited: Section 58012, Health and Safety Code; and Section 17210(g), Education Code. Reference: Sections 17210(g) and 17213.1, Education Code.

Amend section 69104 to read:

§69104. Preparation of a Phase I and Phase I Addendum.

(a) A Phase I shall be prepared for the Proposed School Site pursuant to this article and section 17213.1, subdivision (a) of the Education Code. The Phase I shall be submitted to the Department for review and approval.

(b) The Phase I shall be conducted in accordance with the ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process cited in section 69103, subsection (a)(1).

~~(c) The Phase I may contain results of sampling as follows: lead in soils from lead-based paint (performed in accordance with the sampling protocols described in section 69105 of these regulations), PCBs in soil from electrical transformers (performed in accordance with sampling protocols described in section 69107), and OCPs in soil from termiticide application (performed in accordance with the sampling protocol described in section 69106 of these regulations). If a Phase I has already been completed and submitted to the Department, these sampling results may be submitted as a Phase I Addendum.~~

~~(d) The Phase I shall include, but is not limited to, the following:~~

~~(1) a site map describing the boundary of the project and the current development on the property;~~

~~(2) a description of the intended use of the property that includes whether the school district intends to use all or a portion of the parcel, the type of site (new or expanding), type of school proposed (grade levels of students), and the disposition of any existing structures;~~ and

~~(3) past and existing land uses, including but not limited to, easements; adjacent properties; former governmental use; residential, industrial, or commercial uses;~~ and

~~(4) recommendations consistent with section 69108 of this article.~~

(d) In addition to the contaminants and sources identified in the ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process cited in section 69103, subsection (a)(1), the Phase I shall identify and evaluate all sources for the potential release or presence of hazardous material on the Proposed School Site, including, but not limited to, the following:

(1) agricultural use,

(2) debris or stockpiles,

(3) fill material,

(4) electrical transformers, oil filled electrical equipment, or hydraulic systems,

(5) government use or ownership,

(6) grading activities

(7) illegal drug manufacturing,

(8) lead-based paint application,

(9) mines,

- (10) naturally occurring hazardous materials,
- (11) petroleum deposits or use,
- (12) railroad use or easements,
- (13) residential use,
- (14) surface drainage pathways,
- (15) termiticide application, and
- (16) utility easements.

(e) If a Phase I Addendum is submitted more than 180 days subsequent to the date that the Phase I was conducted, or if a Phase I was conducted for the Proposed School Site more than 180 days prior to its submittal to the Department, information to verify current site conditions shall be submitted to the Department. Verification activities include, but are not limited to, the following: ~~(1) a site reconnaissance visit;~~ (2) document any changes to site conditions or site boundaries; ~~and (23) updated interviews,~~ searches, reviews, visual inspections, and declarations ~~review of environmental records,~~ as described in the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process cited in section 69103, subsection (a)(1).

(f) A Phase I Addendum shall be submitted to the Department for review and approval along with or after submittal of the Phase I for the site. The Phase I Addendum shall include recommendations consistent with section 69109 of this article and may contain results of sampling and analysis as follows:

(1) lead in soil performed in accordance with the sampling protocols described in section 69105 of these regulations,

(2) OCPs in soil performed in accordance with the sampling protocols described in section 69106 of these regulations, and/or

(3) PCBs in soil performed in accordance with the sampling protocol described in section 69107 of these regulations.

~~(f) The Phase I shall identify and evaluate all sources for the potential release or presence of hazardous material on the Proposed School Site, including, but not limited to, all of the following:~~

- ~~(1) agricultural use,~~
- ~~(2) mines,~~
- ~~(3) surface drainage pathways,~~
- ~~(4) fill material,~~
- ~~(5) debris,~~
- ~~(6) illegal drug manufacturing, and~~
- ~~(7) naturally occurring hazardous materials.~~

Note: Authority cited: Section 58012, Health and Safety Code; and Section 17210(g), Education Code. Reference: Sections 17210(g) and 17213.1, Education Code.

Amend section 69105 to read:

§69105. Sampling for Lead in Soil from Lead-based Paint.

(a) The school district may choose to submit sampling data for lead in soil from lead-based paint in one of the following reports: (1) the Phase I; or (2) the Phase I Addendum; or (3) the Preliminary Endangerment Assessment, in accordance with subsections (b) through (h) below:-

(b) Lead-based paint evaluation. Unless the Department determines that lead in soil is not a concern based on review of the Phase I, soil samples shall be collected for any structures on the Proposed School Site with paint or surface coatings, with the exception of residential structures constructed on or after January 1, 1979, and schools constructed on or after January 1, 1993, to evaluate possible lead in soil. Based upon review of the Phase I, the Department may determine that lead contamination in soil from lead-based paint is the only potential source of contamination at a Proposed School Site, and may require that sampling data for lead in soil from lead-based paint be submitted in the Phase I Addendum or the Preliminary Endangerment Assessment.

(c) Prior to demolition of ~~structures~~ buildings or removal of foundations or slabs, or movement of soils on the Proposed School Site, pre-demolition sampling for lead in soil from lead-based paint shall be implemented in accordance with the following protocols:

(1) ~~Sample collection~~ Sample collection. Surface soil samples (zero to six inches, inclusive) shall be collected from around the perimeter of the structures, in adjacent to areas with the highest potential for likelihood of lead deposits (such as under windows, doors, porches, fences and stairs, and in drainage areas). If concrete or asphalt borders a structure, surface soil samples (zero to six inches) shall be collected from the nearest unpaved areas, including unpaved drainage areas where associated the run off from the paved areas may collect. The Department may require collection of samples from underneath existing paved areas, based upon the history of the ~~site~~ property. The Department shall be consulted to determine the number and location of samples necessary to adequately evaluate ~~characterize possible~~ lead in soil from lead-based paint at the Proposed School Site.

(2) ~~Additional sample collection~~ Additional sample collection. If lead from lead-based paint is detected ~~identified~~ in the soil samples, the Department may require additional step-out samples ~~borings~~ on the Proposed School Site to determine the horizontal ~~lateral~~ and vertical extent of contamination.

(d) If demolition of ~~structures~~ buildings has occurred, but ~~and~~ foundations or slabs are ~~no longer present~~ and the site has not been graded, post-demolition sampling for lead in soil from lead-based paint shall be implemented in accordance with the following protocols:-

(1) ~~Sample collection~~ Sample collection. Surface soil samples (zero to six inches) shall be collected from two sets of sampling locations around the perimeter of the

former structures. The first set should be collected in areas with the highest potential for lead deposits (such as under pre-existing windows, doors, porches, doors, fences and stairs, and in drainage areas). The second set should be collected at the extent of soil disturbed by removal of demolition debris. If concrete or asphalt borders a structure, surface soil samples (zero to six inches) shall be collected from the nearest unpaved areas where associated run off may collect. If soil is exposed within the footprints of former structures, surface soil samples (zero to six inches) shall be collected within the footprints. The Department may require collection of samples from underneath existing paved areas, based upon the history of the site. The Department shall be consulted to determine the number and location of samples necessary to adequately evaluate possible lead in soil at the Proposed School Site. The Proposed School Site shall be divided into grids as determined in consultation with the Department, and surface and subsurface soil samples shall be taken from the center of each grid.

~~(2) Additional sample collection~~ Additional sample collection. If lead from lead-based paint is detected in soil samples identified in the soil after demolition, the Department may require additional step-out ~~samples~~ borings on the Proposed School Site to determine the horizontal ~~lateral~~ and vertical extent of contamination.

~~(e) Sample Analysis.~~ Soil samples shall be analyzed for lead using USEPA Test Methods. Alternatively, on-site field analyses for lead in soil may be conducted using field portable X-Ray Fluorescence (XRF) instrumentation. If demolition of structures, removal of foundations or slabs, or movement of soil on the Proposed School Site has occurred, post-demolition sampling for lead in soil shall be implemented in accordance with the following protocols:

(1) Sample collection. The Proposed School Site shall be divided into grids as determined in consultation with the Department, and surface (zero to six inches) and subsurface (two to three feet) soil samples shall be collected from the center of each grid.

(2) Additional sample collection. If lead is detected in soil samples, the Department may require additional step-out samples on the Proposed School Site to determine the horizontal and vertical extent of contamination.

(f) Sample analysis. Soil samples shall be analyzed for lead using USEPA Test Methods, and may include laboratory and on-site field analyses for lead in soil using portable X-Ray Fluorescence (XRF) instrumentation. The uppermost soil from the core (closest to ground surface) shall be analyzed.

~~(g) Laboratory Quality Control~~ Laboratory quality control. Quality Control (QC) procedures specified in USEPA Test Methods shall be followed. The data shall be qualified in accordance with the National Functional Guidelines cited in section 69103, subsection (a)(4) and USEPA guidance cited in section 69103, subsection (a)(5).

~~(h)(g) Data Submission~~ Data submission. Data identifying concentrations of lead detected in soil samples collected from the Proposed School Site shall be submitted to the Department.

Note: Authority cited: Section 58012, Health and Safety Code; and Section 17210(g),

Education Code. Reference: Sections 17210(g) and 17213.1, Education Code.

Amend section 69106 to read:

§ 69106. Sampling for OCPs in Soil.

(a) The school district may choose to submit sampling data for OCPs in soil in one of the following reports: 1) the Phase I Addendum; or 2) the Preliminary Endangerment Assessment, in accordance with subsections (b) through (h) below:

(b) *OCP ~~E~~evaluation*. Unless the Department determines that OCPs in soil are not a concern based on review of the Phase I, soil samples shall be collected for any structures on the Proposed School Site with wood components constructed prior to January 1, 1989, to evaluate possible OCPs in soil.

(c) Prior to demolition of structures or removal of foundations or slabs, or movement of soil on the Proposed School Site, pre-demolition sampling for OCPs in soil shall be implemented in accordance with the following protocols:

(1) *Sample collection*. Surface (zero to six inches) and subsurface (two to three feet) soil samples shall be collected from around the perimeter of the structures, in areas with the highest potential for OCPs (such as near footings). If the structures have raised floors or porches, surface soil samples (zero to six inches) shall be collected beneath these areas. If concrete or asphalt borders a structure, the Department shall require collection of surface (zero to six inches) and subsurface (two to three feet) soil samples underneath existing paved areas. The Department shall be consulted to determine the number and location of samples necessary to adequately evaluate possible OCPs in soil at the Proposed School Site.

(2) *Additional sample collection*. If OCPs are detected in soil samples, the Department may require additional step-out samples on the Proposed School Site to determine the horizontal and vertical extent of contamination.

(d) If demolition of structures has occurred, but foundations or slabs are present and the site has not been graded, post-demolition sampling for OCPs in soil shall be implemented in accordance with the following protocols:

(1) *Sample collection*. Surface (zero to six inches) and subsurface (two to three feet) soil samples shall be collected from two sets of sampling locations around the perimeter of the structures. The first set should be collected in areas with the highest potential for OCPs (such as near footings). The second set should be collected at the extent of soil disturbed by removal of demolition debris. If soil is exposed within the footprints of former structures, surface (zero to six inches) and subsurface (two to three feet) soil samples shall be collected within the footprints. If concrete or asphalt borders a structure, the Department shall require collection of surface (zero to six inches) and subsurface (two to three feet) soil samples underneath existing paved areas. The Department shall be consulted to determine the number and location of samples necessary to adequately evaluate possible OCPs in soil at the Proposed School Site.

(2) *Additional sample collection*. If OCPs are detected in soil samples, the Department may require additional step-out samples on the Proposed School Site to

determine the horizontal and vertical extent of contamination.

(e) If demolition of structures, removal of foundations or slabs, or movement of soil on the Proposed School Site has occurred, post-demolition sampling for OCPs in soil shall be implemented in accordance with the following protocols:

(1) *Sample collection.* The Proposed School Site shall be divided into grids as determined in consultation with the Department, and surface (zero to six inches) and subsurface (two to three feet) soil samples shall be collected from the center of each grid.

(2) *Additional sample collection.* If OCPs are detected in soil samples, the Department may require additional step-out samples on the Proposed School Site to determine the horizontal and vertical extent of contamination.

(f) *Sample analysis.* Soil samples shall be analyzed for OCPs using USEPA Test Methods.

(g) *Laboratory ~~Q~~quality ~~C~~ontrol.* Quality Control (QC) procedures specified in USEPA Test Methods shall be followed. The data shall be qualified in accordance with the National Functional Guidelines cited in section 69103, subsection (a)(3) and USEPA guidance cited in section 69103, subsection (a)(5).

(h) *Data ~~S~~ubmission.* Data identifying concentrations of OCPs detected in soil samples collected from the Proposed School Site shall be submitted to the Department.

Note: Authority cited: Section 58012, Health and Safety Code; and Section 17210(g), Education Code. Reference: Sections 17210(g) and 17213.1, Education Code.

Amend § 69107 to read:

§69107. Sampling for PCBs in Soil from Electrical Transformers.

(a) The school district may choose to submit data for PCBs in soil from electrical transformers in one of the following reports: (1) the Phase I; or (2) the Phase I Addendum; or (23) the Preliminary Endangerment Assessment, in accordance with subsections (b) through (f) below. ~~Based upon review of the Phase I, the Department may determine that PCB sampling data must be submitted in a Phase I Addendum or a Preliminary Endangerment Assessment.~~

(b) ~~Electrical~~PCB transformer evaluation. Soil samples shall be collected for any historical (even if removed or replaced by a newer transformer) or current transformers on or adjacent to the Proposed School Site that were installed before January 1, 1979. ~~If visual staining of the soil in proximity to a transformer is observed, or if historical information indicates transformers may have contained PCBs, the Department may require collection of soil samples to evaluate the possible contamination~~PCBs in soil on the Proposed School Site.

(c) Sample collection. Surface (zero to six inches) and subsurface (two to three feet) ~~Soil~~ soil samples shall be collected in close proximity to the base of each pole or pad-mounted electrical transformer. ~~Soil samples shall be collected at surface (zero to six inches, inclusive) and at a depth of two to three feet below ground surface.~~ If PCBs from electrical transformers are detected/identified in the soil samples, the Department may require additional step-out samples/borings on the Proposed School Site to determine the horizontal/lateral and vertical extent of contamination.

(d) Sample analysis. Initially, only surface soil samples (zero to six inches) shall be analyzed for PCBs using USEPA Test Methods. If PCBs are detected in surface soil samples (zero to six inches), the subsurface soil samples (two to three feet) that were collected at depth shall also be analyzed.

(e) ~~Laboratory Q~~quality C~~ontrol.~~ QC procedures specified in USEPA Test Methods shall be followed. The data shall be qualified in accordance with the National Functional Guidelines cited in section 69103, subsection (a)(3) and USEPA guidance cited in section 69103, subsection (a)(5).

(f) ~~Data S~~ubmission. Data identifying concentrations of PCBs detected in soil samples collected from the Proposed School Site shall be submitted to the Department.

Note: Authority cited: Section 58012, Health and Safety Code; and Section 17210(g), Education Code. Reference: Sections 17210(g) and 17213.1, Education Code.

Amend §69108 to read:

§69108. Phase I Recommendations.

The Phase I shall contain one of the following recommendations:

(a) A further investigation of the Proposed School Site is not required since the Phase I demonstrates that neither a release of hazardous material nor the presence of a naturally occurring hazardous material, which would pose a threat to public health or the environment, was indicated at the site. ~~No action is required for the Proposed School Site. A Phase I or Phase I Addendum that contains data from investigation of lead in soil from lead-based paint, PCBs in soil from electrical transformers, or OCPs in soil from termiticide application may recommend that no further site investigation is required if the Phase I and/or Phase I Addendum demonstrate that lead, PCB and/or OCP concentrations in soils do not exceed concentrations determined by the Department on a case-by-case basis to be protective of human health and the environment.~~

(b) Lead in soil from lead-based paint, OCPs in soil from termiticide application, and/or PCBs in soil from electrical transformers are the only potential sources of contamination at a Proposed School Site and an evaluation ~~Investigation of lead in soil from lead-based paint and/or PCBs in soil from electrical transformers is recommended but has not yet been completed. Results of this investigation~~ evaluation will be submitted to the Department ~~as in~~ a Phase I Addendum.

(c) A Preliminary Endangerment Assessment is ~~needed~~ required, including sampling or testing to determine one or more of the following:

- (1) If a release of hazardous material has occurred and, if so, the extent of the release.
- (2) If there is the threat of a release of hazardous materials.
- (3) If a naturally occurring hazardous material is present.

Note: Authority cited: Section 58012, Health and Safety Code; and Section 17210(g), Education Code. Reference: Sections 17210(g) and 17213.1, Education Code.

Add section 69109:

§69109. Phase I Addendum Recommendations.

The Phase I Addendum shall contain one of the following recommendations:

(a) A further investigation of the Proposed School Site is not required. A Phase I Addendum that contains data from evaluation of lead, OCPs, or PCBs in soil may recommend that further investigation of the site is not required if all of the following apply:

(1) the Phase I Addendum demonstrates that lead in soil from lead-based paint, OCPs in soil from termiticide application, and/or PCBs in soil from electrical transformers are the only potential sources of contamination at a Proposed School Site; and

(2) concentrations of lead, OCPs, and/or PCBs in soil do not exceed concentrations determined by the Department on a case-by-case basis to be protective of public health and the environment.

(b) A Preliminary Endangerment Assessment is needed, including sampling or testing, to determine one or more of the following:

(1) If a release of hazardous material has occurred and, if so, the extent of the release.

(2) If there is the threat of a release of hazardous materials.

(3) If a naturally occurring hazardous material is present.

Note: Authority cited: Section 58012, Health and Safety Code; and Section 17210(g), Education Code. Reference: Sections 17210(g) and 17213.1, Education Code.